

FACT SHEET

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0045144; AI 31393; PER20080001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** City of Marksville
City of Marksville Sewage Treatment Plant
400 North Main Street
Marksville, LA 71351
- II. **PREPARED BY:** Eura DeHart
- DATE PREPARED:** May 28, 2008
- III. **PERMIT ACTION:** reissue LPDES permit LA0045144, AI 31393; PER20080001
- LPDES application received: March 28, 2008
- EPA has not retained enforcement authority.
LPDES permit issued: March 21, 2003
LPDES permit expired: March 31, 2008

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated **sanitary** wastewater from a publicly owned treatment works serving the City of **Marksville** and the Tunica-Biloxi Indian Reservation.
- B. The permit application does not indicate the receipt of **industrial** wastewater.
- C. The facility is located on Sugarpoint Road in Marksville, Avoyelles Parish.
- D. The treatment facility consists of two three-cell **oxidation** ponds. Disinfection is by chlorination.
- E. Outfall 001
- Discharge Location: Latitude 31° 11' 59" North
Longitude 92° 3' 50" West
- Description: treated sanitary wastewater
- Design Capacity: 2.0 MGD
- Type of Flow Measurement which the facility is **currently** using:
Continuous Recorder

Fact Sheet

LA0045144; AI 31393; PER20080001

Page 2

V. RECEIVING WATERS:

The discharge is into the Red River in segment 100201 of the Red River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of the Red River is 1,740 cfs.

The **hardness value** is 153.06 mg/l and the **fifteenth percentile value for TSS** is 26 mg/l. (Memo dated September 3, 2002 from Mr. Max J. Forbes, Jr., Louisiana Department of Environmental Quality.)

The designated uses and degree of support for Segment 100201 of the Red River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 100201	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Full	Full	N/A	Full	N/A	N/A

^{1/}The designated uses and degree of support for Segment 100201 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100201 of the Red River Basin, is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as an endangered species. Since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat, LDEQ has determined that the issuance of this LPDES permit is not likely to adversely affect the pallid sturgeon or its aquatic habitats. As instructed by the FWS in a letter dated October 24, 2007, from Boggs (FWS) to Brown (LDEQ), this fact sheet has been sent to the FWS for review and consultation.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public

Fact Sheet

LA0045144; AI 31393; PER20080001

Page 3

hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Eura DeHart
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg (lbs./day)	Monthly Avg	Weekly Avg	Basis
BOD ₅	500	30 mg/l	45 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size which discharge into the Red River.
TSS	1501	90 mg/l	135 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size which discharge into the Red River.

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this

Fact Sheet

LA0045144; AI 31393; PER20080001

Page 4

water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Toxicity Characteristics

In accordance with EPA's Region 6 Post-Third Round Toxics Strategy, permits issued to treatment works treating domestic wastewater with a flow (design or expected) greater than or equal to 1 MGD shall require biomonitoring at some frequency for the life of the permit or where available data show reasonable potential to cause lethality, the permit shall require a whole effluent toxicity (WET) limit (*Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, August 13, 2007 VERSION 5).

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. LAC 33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. The biomonitoring procedures stipulated as a condition of this permit are as follows:

The permittee shall submit the results of any biomonitoring testings performed in accordance with the LPDES Permit No. LA0045144, **Biomonitoring Section** for the organisms indicated below.

TOXICITY TESTSFREQUENCY

Acute static renewal 48-hour definitive test
using Pimephales promelas

1/quarter

Acute static renewal 48-hour definitive test
using Daphnia pulex

1/quarter

Dilution Series - The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional concentrations shall be 2%, 3%, 4%, 5%, and 7%. The low-flow effluent concentration (critical low-flow dilution) is defined as 5% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in the **Biomonitoring Section** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in the **Biomonitoring Section** of the permit.

The permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient

Fact Sheet

LA0045144; AI 31393; PER20080001

Page 5

toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.2383. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0045144: Issued: March 21, 2003
Expired: March 31, 2008

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	30 mg/l	45 mg/l	2/week	6 Hr. Composite
TSS	90 mg/l	135 mg/l	2/week	6 Hr. Composite
Fecal Coliform Colonies	200	400	2/week	Grab

The permit contains biomonitoring.

The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) **Inspections**

A review of the files indicates the most recent inspection performed at the facility was conducted on December 11, 2006. The following was noted during the inspection:

Facility was inspected in conjunction with a Compliance Evaluation Inspection. Facility has two three-cell oxidation ponds with a chlorine contact chamber. Effluent is pumped to the Red River. There was no bar screen at the headworks to collect sewer related debris which was collecting on sides of new oxidation pond. Reconciliation of DMR for month of July with analytical data was not possible due to different flow measurements with logbook and lab data sheets. pH is sampled daily but is not reported on monthly DMRs. pH buffers for pH 4 and pH 8 were expired. pH buffers will be ordered and replaced as soon as possible. pH excursions occurred twice during June 2006.

B) **Compliance and/or Administrative Orders**

A review of the files indicates there have been no recent enforcement actions administered against this facility.

C) **DMR Review**

A review of the discharge monitoring reports for the period beginning March 1, 2006 through February 29, 2008 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
pH, Max.	001	June 2006	9.0	9.2

Fact Sheet

LA0045144; AI 31393; PER20080001

Page 6

XII. ADDITIONAL INFORMATION:

In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body. The LDEQ and USEPA will be conducting TMDLs in the Red River Basin Subsegment 100201. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 2.0 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 2.0 \text{ MGD} \times 30 \text{ mg/l} = 500 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 1.00 and 5.00 MGD.

Effluent Characteristics**Monitoring Requirements**

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/week	6 Hr. Composite
Total Suspended Solids	2/week	6 Hr. Composite
Fecal Coliform Bacteria	2/week	Grab
pH	2/week	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

Fact Sheet

LA0045144; AI 31393; PER20080001

Page 7

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Fact Sheet.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Marksville, City of Marksville Sewage Treatment Plant, March 28, 2008.